

In the Claims

1-31. (Cancelled)

32. (Currently Amended) A process for preparing a soluble whey protein hydrolysate containing bioactive peptides which comprises:

- C3
- i) hydrolysing a whey protein-containing substrate with at least one heat labile protease, at a temperature of between about ~~30~~20°C and ~~70~~65°C at a pH of about 6 to about 8.5 when said ~~enzyme~~protease is a neutral protease, at a pH of about 3.5 to about 5 when said ~~enzyme~~protease is an acid protease, and at a pH of about 5 to about 10 when said ~~enzyme~~protease is an alkaline protease, ~~and~~
 - ii) terminating said hydrolysis when a degree of hydrolysis of no greater than ~~45~~10% has been reached by deactivating said protease under conditions ~~which are sufficiently mild to avoid substantial denaturation peptides in said hydrolysate~~ produce a hydrolysate with a solubility of at least 65%,
and
 - iii) testing said hydrolysate for bio-activity.

33. (Previously Added) A process as claimed in claim 32 wherein said substrate is sweet whey or sweet whey protein concentrate.

34. (Previously Added) A process as claimed in claim 32 wherein said protease is selected from the group consisting of Protease P6, Protease A, Protease M, Peptidase, Neutrase, Validase and AFP 2000.

35. (Previously Added) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises heat deactivation.

C4 36. (Currently Amended) A process according to claim 35 wherein said heat deactivation comprises heating ~~and~~said hydrolysate for up to ten seconds to a temperature up to 95°C.

37. (Cancelled)

38. (Cancelled)

39. (Previously Added) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises altering the pH of said whey protein-containing substrate to a pH at which said protease is not active.

40. (Previously Added) A process as claimed in claim 39 wherein said hydrolysis terminating step includes heat deactivation.

41. (Previously Added) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises subjecting said hydrolysate to ultrafiltration with an ultrafiltration membrane having a nominal molecular weight cutoff in the range of 10-500kDa.

42. (Previously Added) A process as claimed in claim 32 wherein said enzyme is immobilised on an inert support during said hydrolysis step.

43. (Previously Added) A process as claimed in claim 42 wherein said inert support is Roehn Eupergit, carrageenan particles, chitosan particles or any other suitable inert support material.

44. (Previously Added) A process as claimed in claim 32 wherein the degree of hydrolysis is about 3-5%.

45. (Previously Added) A process as claimed in claim 32 wherein the substrate also contains lactose, in an amount of about 5% by weight or higher.

C5 46. (Currently Amended) A process as claimed in claim ~~32~~45 wherein said lactose content is about 10% by weight or higher.

47. (Previously Added) A process as claimed in claim 45 wherein the amount of lactose present in the substrate is up to about 30% by weight.

48. (Previously Added) A process as claimed in claim 45 wherein the amount of lactose present in the substrate is up to about 50% by weight.

C6 49. (Currently Amended) A process as claimed in claim 45, wherein the substrate is also treated with lactase and/or β -galactosidase, either before, during or after the whey protein hydrolysis, to hydrolyse the lactose to galactose and glucose and synthesize galacto-oligosaccharides.

50. (Previously Added) A process as claimed in claim 32 wherein the hydrolysate so prepared contains one or more of the bioactive peptides selected from the group consisting of AFE, LFSH (SEQ ID NO: 1), ILKEKH (SEQ ID NO: 2), LIVTQ (SEQ ID NO: 3), MKG, LDIQK (SEQ ID NO: 4), VF, ALPMH (SEQ ID NO: 5), VTSTAV (SEQ ID NO: 6), LHLPLP (SEQ ID NO: 7), LVYPPFGPIPNQLPQNIPP (SEQ ID NO: 8) and LFRQ (SEQ ID NO: 9).

51. (Cancelled)

52. (Cancelled)

53. (Cancelled)

54. (Cancelled)

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Filed : April 2, 2001

55. (Cancelled)

56. (Cancelled)

57. (Cancelled)

58. (Cancelled)

C7 59. (Currently Amended) Any one or any combination of two or more of the bioactive peptides selected from the group consisting of AFE, LFSH (SEQ ID NO: 1), ILKEKH (SEQ ID NO: 2), LIVTQ (SEQ ID NO: 3), MKG, LDIQK (SEQ ID NO: 4), ALPMH (SEQ ID NO: 5), VTSTAV (SEQ ID NO: 6), ~~LHLPLP (SEQ ID NO: 7)~~, LVYPFPGPIPNLQNIPP (SEQ ID NO: 28) and LFRQ (SEQ ID NO: 29).

60. (Cancelled)

61. (Cancelled)

62. (Previously Added) A method of reducing systolic blood pressure in a subject which comprises administering an effective amount of a peptide or a combination of peptides as claimed in claim 59.

63. (New) A process as claimed in claim 32 wherein the degree of hydrolysis is from about 4% to about 10%.

C8 64. (New) A process according to claim 32 which includes the additional step of separating individual peptides from said hydrolysates using preparative liquid chromatography.

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65. (New) A process according to claim 64 wherein said liquid chromatography comprises reverse phase high performance liquid chromatography.

66. (New) A process according to claim 65 which includes the additional step of testing said individual peptides for bio-activity.

C8

67. (New) A process according to claim 66 wherein the bio-activity tested for is angiotensin converting enzyme inhibiting activity.

68. (New) A process according to claim 32 wherein the bio-activity tested for is angiotensin converting enzyme inhibiting activity.
